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PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/084,825	
	Filing Date	February 25, 2002	
	First Named Inventor	Co, Man Sung	
	Group Art Unit	Unassigned	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	32	Attorney Docket Number	011823-004012US

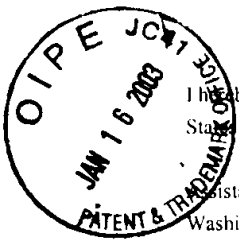
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Firm and Individual name	Townsend and Townsend and Crew LLP Rosemarie L. Celli Reg. No. 42,397	
Signature	<i>Rosemarie L. Celli</i>	
Date	January 10, 2003	

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PATENT
Attorney Docket No.: 011823-004012US

On 1-10-03

TOWNSEND and TOWNSEND and CREW LLP

By: Leticia Hernandez
Leticia Hernandez

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Co et al.

Application No.: 10/084,825

Filed: February 25, 2002

For: INCREASING ANTIBODY
AFFINITY BY ALTERING
GLYCOSYLATION OF
IMMUNOGLOBULIN VARIABLE
REGION

Examiner: Unassigned

Art Unit: Unassigned

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR §1.97 and
§1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

The references cited on attached PTO/SB/08A and PTO/SB/08B forms are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references 1-9, 11-15, 18-23, 25-37, and 39 can be found in Application No. 08/862,871, filed May 23, 1997 (Attorney Docket No. 011823-004011US). Copies of references of 10, 16-17, 24, and 38 are enclosed herewith. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information, and no inference should be made that the information and references cited are, or are considered to be material to patentability because they are in this statement. No inference should be made that the information and references cited are prior art merely because they are in this statement.

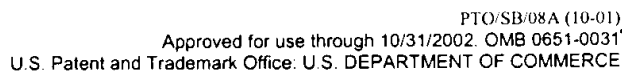
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Respectfully submitted,



Rosemarie L. Celli
Reg. No. 42,397

TOWNSEND and TOWNSEND and CREW LLP
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Sheet	1	of	4
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Application Number	10/084,825
Filing Date	February 25, 2002
First Named Inventor	Co, Man Sung, et. al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	011823-004012US

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U.S. PATENT DOCUMENTS

		Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Examiner	Cite No. ¹	Number Kind Code ² (if known)			
	1	6,054,297	04-25-2000	Carter et al.	
	2	5,821,337	10-13-1998	Carter et al.	
	3	5,730,982	03-24-1998	Scheinberg	
	4	5,714,350	02-03-1998	Co et al.	
	5	5,147,637	09-15-1992	Wright et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MMDDYYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
	6	WO	90/07861		07-26-1990			<input type="checkbox"/>
	7	WO	92/22653		12-23-1992			<input type="checkbox"/>
	8	EP	0 239 400		09-30-1987			<input type="checkbox"/>
	9	EP	0 438 312		07-24-1991			<input type="checkbox"/>
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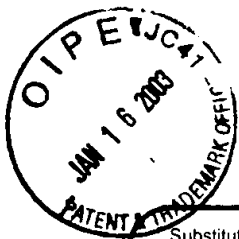
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 4

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Application Number	10/084,825
Filing Date	February 25, 2002
First Named Inventor	Co, Man Sung, et. al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	011823-004012US

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OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	T ²
	10	AMIT et al., "Three-Dimensional Structure of an Antigen-Antibody Complex at 2.8 A Resolution," <i>Science</i> , 1986, 233:747-753.	
	11	ARNAOUT et al., "Leukocyte Adhesion Molecules Deficiency: Its Structural Basis, Pathophysiology And Implications For Modulating The Inflammatory Response," <i>Immunol. Rev.</i> , 1990, 114:145-180.	
	12	BURGESS, "Possible Dissociation of the Heparin-binding and Mitogenic Activities of Heparin-binding (Acidic Fibroblast) Growth Factor-1 from Its Receptor-binding Activities by Site-directed Mutagenesis of a Single Lysine Residue," <i>Journal of Cell Biology</i> , 1990, 111:2129-2138.	
	13	CARTER et al., "Humanization of an Anti-p185 ^{HER2} Antibody for Human Cancer Therapy," <i>Proc. Natl. Acad. Sci. USA</i> , 1992, 89:4285-4289.	
	14	CO et al., "Chimeric and Humanized Antibodies with Specificity for the CD33 Antigen ¹ ," <i>Journal of Immunology</i> , 1992, 148:1149-1154.	
	15	DAUGHERTY et al., "Polymerase Chain Reaction Facilitates the Cloning, CDR-grafting, and Rapid Expression of a Murine Monoclonal Antibody Directed Against the CD18 Component of Leukocyte Integrins," <i>Nucl. Acids Res.</i> , 1991, 19(9):2471-2476.	
	16	DELENTE, "Glycosylation revisited," <i>Trends in Biotechnology</i> , 1985, 3(9):218.	
	17	GROVES et al., "Production of an Ovine Monoclonal Antibody to Testosterone by an Interspecies Fusion," <i>Hybridoma</i> , 1987, 6(1): 71-76.	
	18	HARRIS, "Therapeutic Antibodies - The Coming of Age," <i>TIBTECH</i> , February 1993, 11:42-44.	
	19	HIRD et al., "Genes and Cancer," Chapter 17, 1990, 183.	
	20	JONES et al., "Replacing the Complementarity-determining Regions, In a Human Antibody with those from a Mouse," <i>Nature</i> , 1986, 321:522-525.	
	21	LAZAR et al., "Transforming Growth Factor α : Mutation of Aspartic Acid 47 and Leucine 48 Results in Different Biological Activities," <i>Molec. Cell. Biol.</i> , 1988, 8(3):1247-1252.	
	22	LEATHERBARROW et al., "Effector Functions of a Monoclonal Aglycosylated Mouse IgG2a: Binding and Activation of Complement Component C1 and Interaction With Human Monocyte Fc Receptor," <i>Molec. Immunol.</i> , 1985, 22(4):407-415.	
	23	MURAOKA and SHULMAN, "Structural Requirements for IgM Assembly and Cytolytic Activity," <i>J. Immunol.</i> , 1989, 142(2):695-701.	

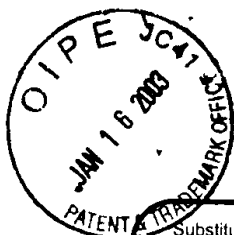
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 3 of 4

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Application Number	10/084,825
Filing Date	February 25, 2002
First Named Inventor	Co, Man Sung, et. al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	011823-004012US

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	24	PAUL, "Fundamental Immunology," 1993, Chapter 8, pg. 242, Raven Press NY.	
	25	QUEEN et al., "A Humanized Antibody that Binds to the Interleukin 2 Receptor," <i>Proc. Natl. Acad. Sci. USA</i> , 1989, 86:1029-1033.	
	26	RIECHMANN et al., "Reshaping Human Antibodies for Therapy," <i>Nature</i> , 1988, 332:323-327.	
	27	SCHEINBERG et al., "Monoclonal Antibody M195: A Diagnostic Marker for Acute Myelogenous Leukemia," <i>Leukemia</i> , 1989, 3(6):440-445.	
	28	SCHEINBERG et al., "A phase I Trial of Monoclonal Antibody M195 in Acute Myelogenous Leukemia: Specific Bone Marrow Targeting and Internalization of Radionuclide," <i>J. Clin. Oncol.</i> , 1991, 9(3):478-490.	
	29	SOX, "Attachment of Carbohydrate to the Variable Region of Myeloma Immunoglobulin Light Chains," <i>Proc. Natl. Acad. Sci.</i> , 1970, 66(3):975-982.	
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	31	TAO et al., "Studies of Aglycosylated Chimeric Mouse-Human IgG," <i>Journal of Immunology</i> , 1989, 143:8.	
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	33	VERHOEYEN et al., "Reshaping Human Antibodies: Grafting an Antilysozyme Activity," <i>Science</i> , 1988, 239:1534-1536.	
	34	WALDMANN, "Monoclonal Antibodies in Diagnosis and Therapy," <i>Science</i> , 1991, 252:1657-1662.	
	35	WALLICK et al., "Glycosylation of a V _H Residue of a Monoclonal Antibody Against (put in alpha) (1→6) Dextran Increases Its Affinity For Antigen," <i>J. Exp. Med.</i> , 1988, 168:1099-1109.	
	36	WRIGHT et al., "Antibody Variable Region Glycosylation: Position Effects on Antigen Binding and Carbohydrate Structure," <i>EMBO J.</i> , 1991, 10(10):2717-2723.	

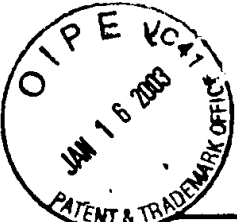
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/084,825		
		Filing Date	February 25, 2002		
		First Named Inventor	Co, Man Sung, et. al.		
		Art Unit	Unassigned		
		Examiner Name	Unassigned		
Sheet	4	of	4	Attorney Docket Number	011823-004012US

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	37	WRIGHT et al., "Identification of the C3bi Receptor Of Human Monocytes and Macrophages by using Monoclonal Antibodies," <i>Proc. Natl. Acad. Sci. USA</i> , 1983, 80:5699-5703.	
	38	WRIGHT et al., "Springer Semin Immunology," 1993, 15:259-273.	
	39	ZOLLER et al., "Oligonucleotide-Directed Mutagenesis of DNA Fragments Cloned into M13 Vectors," <i>Methods in Immunology</i> , 100:469-500.	

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